# **MANISH SINGH**

Pune, Maharashtra 411057

### **SUMMARY**

DevOps Engineer with 6 years of proven expertise designing, automating, and managing cloud-native infrastructures across Azure and AWS. Skilled in Infrastructure as Code (Terraform, Crossplane), CI/CD (GitHub Actions, Azure DevOps, Argo CD), and container orchestration (Docker, Kubernetes, AKS). Adept at implementing observability (Grafana, Prometheus) and GenAl solutions (RAG, Azure OpenAl) to drive innovation and operational excellence.

#### **SKILLS**

- Cloud Platforms: Azure (Primary), **AWS**
- Infrastructure as Code: Terraform
- CI/CD: GitHub Actions. Azure DevOps, Argo-CD
- Containerization & Orchestration: Docker, Kubernetes, Azure Kubernetes Service (AKS), Helm
- Version Control & Collaboration: Git, Jira, Confluence, Azure Boards
- Automation: Python, Bash

- Observability: Grafana & **Prometheus**
- Gen Al: Retrieval-Augmented Generation (RAG), Azure OpenAI, LLM, Fine tuning

#### **EXPERIENCE**

10/2022 - Current

### DevOps Consultant, KPMG Global Service, Pune, India

## Project: Enterprise-Wide Technology (EWT) - Data Center Automation & Networking

- Designed and implemented a standardized Azure landing zone using Terraform, cutting deployment times by 40% while reinforcing security best practices.
- Automated firewall policy configurations and networking setups to streamline operations and improve security posture.
- Implemented advanced observability solutions by developing real-time monitoring dashboards using Grafana and Prometheus for critical Azure services.
- Deployed Azure services such as Data Factory, Web Apps, and Storage Accounts via terraform module to enhance application availability and storage efficiency.
- Integrated Cross-plane with ArgoCD to enable declarative, cloud-native infrastructure management across multi-cloud environments, ensuring streamlined orchestration and enhanced operational visibility.
- Built a GenAl solution leveraging Azure OpenAl and LangChain for Retrieval-Augmented Generation (RAG) and internal module creation. Fine-tuned OpenAl models using project-specific datasets hosted securely in Azure Blob Storage.

### Project: Beazley - Cloud Migration and High Availability Solutions

Architected high-availability, multi-region Amazon ECS deployments for the Beazley project,

- ensuring fault tolerance and business continuity.
- Integrated Azure Kubernetes Service (AKS) and Docker to containerize and deploy microservices, achieving improved workload scalability and streamlined resource management.

#### 10/2021 - 10/2022

#### DevOps Engineer, Infogain India Private Limited, Pune, India

- Provisioned AWS resources (EC2, ELB, VPC) using Terraform, significantly enhancing scalability and reducing downtime.
- Containerized Java-based applications and deployed them on Kubernetes, optimizing resource utilization.
- Built and maintained CI/CD pipelines on Azure DevOps for seamless deployment to Kubernetes clusters using Helm charts.
- Integrated advanced monitoring and logging solutions to improve system observability and expedite incident resolution.

#### 06/2019 - 10/2021

#### AZURE DEVOPS ENGINNER, Tata Consultancy Services, Pune, India

### **Project: Application Containerization & CI/CD for Microservices**

- Dockerized a Python application and implemented deployment pipelines in Azure CI/CD, reducing deployment time and improving delivery.
- Deployed a suite of .NET microservices on Azure Kubernetes Service (AKS), enhancing scalability and reliability through automated orchestration.
- Automated infrastructure provisioning with Terraform, deploying VMs and related resources on Azure

## **Project: Document Processing Automation and Infrastructure Monitoring**

- Automated the extraction of key-value pairs from medical documents using Azure Form Recognizer, improving processing accuracy.
- Documented technical processes and created onboarding materials, optimizing training for new team members.
- Automated manual tasks wherever possible using scripting languages like Python or Bash.

## **CERTIFICATIONS**

- Microsoft Certified: Azure DevOps Expert (AZ-400)
- Microsoft Certified: Azure Solutions Architect Expert (AZ-305)
- Microsoft Certified: Azure Administrator Associate (AZ-104)
- Microsoft Certified: Azure Fundamentals (AZ-900)
- AWS Certified Solutions Architect Associate (SAA-C03)
- HashiCorp Certified: Terraform Associate (002)
- GitHub Actions Certification
- Google Certified: Associate Cloud Engineer (GCP-ACE)

# **EDUCATION**

05/2019

Bachelor Of Engineering, Computer Science & Engineering Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, MP

GPA: 8.9